

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 250512US55DIV		SERIAL NO. New U.S. Application	
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT		Alan K. SMITH et al			
		FILING DATE		Herewith		GROUP	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
MB	AA	6,326,198	12/04/01	Emerson et al			
	AB	6,299,650	10/09/01	Van Blitterswijk et al			
	AC	5,811,094	09/22/98	Caplan et al			
	AD	5,646,043	07/08/97	Emerson et al			
	AE	4,135,975	01/23/79	Lichtman et al			
	AF	4,514,499	04/30/85	Noll			
	AG	4,861,714	08/29/89	Dean et al			
	AH	5,032,407	07/16/91	Wagner et al			
	AI	5,605,822	02/25/97	Emerson et al			
	AJ	5,670,351	09/23/97	Emerson et al			
	AK	4,481,946	11/13/84	Altshuler et al			
	AL	4,714,680	12/22/87	Civin			
	AM	4,889,812	12/26/89	Guinn et al			
MB	AN	5,032,508	07/16/91	Naughton et al			
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO	
MB	AO	90/15877A2	12/27/90	WIPO w/Abstract			
	AP	95/06409	03/09/95	WIPO w/Abstract			
	AQ	0 358 506	03/14/90	Europe w/Abstract			
	AR	0 455 482	11/06/91	Europe w/Abstract			
	AS	93/18136	09/16/93	WIPO w/Abstract			
MB	AT	93/18137	09/16/93	WIPO w/Abstract			
	AU						
	AV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	AW	M. W. Glacken et al., "Mammalian cell culture: engineering principles and scale-up", Trends in Biotechnology, Vol. 1, No. 4, 1983, PP. 102-108					
	AX	Steven A. ROSENBERG et al., "In Vitro Growth of Murine T Cells II. Growth of In Vitro Sensitized Cells Cytotoxic for Alloantigens", The Journal of Immunology, Vol. 121, No. 5, November 1978, PP. 1951-1955					
	AY	W. French ANDERSON, "Prospects for Human Gene Therapy", Science, Vol. 26, October 26, 1987, pp. 401-409					
	AZ	T.M. Dexter, "The Message in the medium", Nature, Vol. 309, June 1984, pp 746-747					
Examiner				Date Considered 5/13/05			
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 250512US55DIV		SERIAL NO. New U.S. Application	
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT		Alan K. SMITH et al			
		FILING DATE		Herewith		GROUP	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
MB	BA	5,945,225	08/31/99	Speith-Herfurth et al			
	BB	5,670,147	09/23/97	Emerson et al			
	BC	5,199,942	04/06/93	Gillis			
	BD	4,808,611	02/28/89	Cosman			
	BE	4,963,489	10/16/90	Naughton et al			
	BF	5,061,620	10/29/91	Tsukamoto et al			
	BG	5,922,597	07/13/99	Verfaillie et al			
	BH	5,399,493	03/21/95	Emerson et al			
	BI	4,810,643	03/07/89	Souza			
	BJ	4,965,204	10/23/90	Civin			
	BK	5,851,832	12/22/98	Weiss et al			
	BL	5,635,386	06/03/97	Palsson et al			
	BM	4,486,188	12/04/84	Altshuler et al			
MB	BN	4,847,201	07/11/89	Kaswasaki et al			
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO	
	BO						
	BP						
	BQ						
	BR						
	BS						
	BT						
	BU						
	BV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
MB	BW	Manfred R. Koller, et al. "Expansion of Primitive Human Hematopoietic Progenitors in a Perfusion Bioreactor System with LL-3, LL-6, and Stem Cell Factor", Biotechnology, Vol. 11, March, 1993, pp. 358-363					
	BX	Bernhard O. PALSSON et al, "Expansion of Human Bone Marrow Progenitor Cells in a High Cell Density Continuous Perfusion System", Biotechnology, Vol. 11, March, 1993, pp. 368-372					
	BY	Giovanni MIGLIACCIO et al., "In Vitro Differentiation of Human Granulocyte/Macrophage and Erythroid Progenitors: Comparative Analysis of the Influence of Recombinant Human Erythropoietin, G-CSF, GM-CSF, and IL-3 in Serum-Supplemented and Serum-Deprived Cultures", Blood, Vol. 72, No. 1 July 1988, pp. 248-255					
MB	BZ	Ian K. McNiece et al., "Studies on the Myeloid Synergistic Factor From 5637: Comparison with Interleukin-1 Alpha", Blood, Vol. 73, No. 4 (March), 1989, pp. 919-923					
Examiner				Date Considered <i>5/19/05</i>			
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 250512US55DIV		SERIAL NO. New U.S. Application	
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT		Alan K. SMITH et al			
		FILING DATE		Herewith		GROUP	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
MB	CA	5,004,681	04/02/91	Boyse et al			
	CB	5,674,750	10/07/97	Kraus			
	CC	5,728,581	03/17/88	Schwartz			
	CD	5,925,567	07/20/99	Kraus			
	CE	5,994126	11/99	Steinman et al.			
	CF	5,674,750	10/97	Kraus et al.			
MB	CG	5,728,581	3/98	Schwartz et al.			
	CH						
	CI						
	CJ						
	CK						
	CL						
	CM						
	CN						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION		
	CO				YES		NO
	CP						
	CQ						
	CR						
	CS						
	CT						
	CU						
	CV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	CW	Paul BAINES et al., Exp. Hematol. 16:785-789 (1988)					
	CX	Jan A. NOLTA et al., Human Gene Therapy, 1:257-268 (1990)					
	CY	John R. STEPHENSON et al., Proc. Nat. Acad. Sci. U.S.A., Vol. 68, No. 7, pp. 1542-1546, July 1971					
	CZ	Giovanni MIGLIACCIO et al., Exp. Hematol. 18:1049-1055 (1990)					
Examiner				Date Considered <i>5/19/05</i>			
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 250512US55DIV		SERIAL NO. New U.S. Application	
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT		Alan K. SMITH et al			
		FILING DATE Herewith		GROUP			
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
DA							
DB							
DC							
DD							
DE							
DF							
DG							
DH							
DI							
DJ							
DK							
DL							
DM							
DN							
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO	
DO							
DP							
DQ							
DR							
DS							
DT							
DU							
DV							
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
DW	Richard M. Schwartz et al., "In Vitro Myelopoiesis Stimulated by Rapid Medium Exchange and Supplementation With Hematopoietic Growth Factors", Blood, Vol 78, No. 12, December 15, 1991, pp. 3155-3161						
DX	Rob E. Ploemacher et al., "Use of Limiting-Dilution Type Long-Term Marrow Cultures in Frequency Analysis of Marrow-Repopulating and Spleen Colony-Forming Hematopoietic Stem Cells in the Mouse", Blood, Vol 78, No. 10 (November 15, 1991, pp. 2527-2533						
DY	Manfred R. Koller et al., "Effects of Synergistic Cytokine Combinations, Low Oxygen, and Irradiated Stroma on the Expansion of Human Cord Blood Progenitors", Blood, Vol 80, No. 2 (July 15, 1992), pp. 403-411						
DZ	J. AIKEN et al., Journal of Pediatric Surgery, Vol. 25, No. 1 (January), 1990; pp. 140-145						
Examiner <i>100</i>				Date Considered 5/19/05			
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 250512US55DIV		SERIAL NO. New U.S. Application	
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT		Alan K. SMITH et al			
		FILING DATE		Herewith		GROUP	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	EA						
	EB						
	EC						
	ED						
	EE						
	EF						
	EG						
	EH						
	EI						
	EJ						
	EK						
	EL						
	EM						
	EN						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION		
	EO				YES		NO
	EP						
	EQ						
	ER						
	ES						
	ET						
	EU						
	EV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	EW	C. FAVRE et al., "Interleukin-4 has Basophilic and Eosinophilic Cell Growth-Promoting Activity on Cord Blood Cells", Blood, Vol. 1, January 1, 1990, pp. 67-73					
	EX	Yoichi TAKAUE et al., "Limiting-Dilution Analysis of the Effects of Colony-Stimulating Factors, Phytohemagglutinin, and Hydrocortisone on Hematopoietic Progenitor Cell Growth", Blood, Vol. 70, No. 5, November, 1987, pp. 1611-1618					
	EY	Yoichi TAKAUE et al., "Effect of Recombinant Human G-CSF, GM-CSF, IL-3, and IL-1 α on the Growth of Purified Human Peripheral Blood Progenitors", Blood, Vol. 76, No. 2, July 15, 1990, pp. 330-335					
	EZ	H. J. Sutherland et al., "Alternative Mechanisms With and Without Steel Factor Support Primitive Human Hematopoiesis", Blood, Vol. 81, No. 6, March 15, 1993, pp. 1465-1470					
Examiner <i>BS</i> 5/1				Date Considered 5/18/05			
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO 1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO. 250512US55DIV	SERIAL NO. New U.S. Application
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT	Alan K. SMITH et al
		FILING DATE Herewith	GROUP

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	FA						
	FB						
	FC						
	FD						
	FE						
	FF						
	FG						
	FH						
	FI						
	FJ						
	FK						
	FL						
	FM						
	FN						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO
	FO					
	FP					
	FQ					
	FR					
	FS					
	FT					
	FU					
	FV					

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

FW	Lucia H. Coutinho et al., "Effects of Recombinant Human Granulocyte Colony-Stimulating Factor (CSF), Human Granulocyte Macrophage-CSF, and Gibbon Interleukin-3 on Hematopoiesis in Human Long-Term Bone Marrow Culture", Blood, Vol. 11, June 1, 1990, pp. 2118-2129
FX	Susan C. GUBA et al., "Bone Marrow Stromal Fibroblasts Secrete Interleukin-6 and Granulocyte-Macrophage Colony-Stimulating Factor in the Absence of Inflammatory Stimulation: Demonstration by Serum-Free Bioassay, Enzyme-Linked Immunosorbent Assay, and Reverse Transcriptase Polymerase Chain Reaction", Blood, Vol. 80, No. 5, September 1, 1992, pp. 1190-1198
FY	Richard M. SCHWARTZ et al., "Rapid medium perfusion rate significantly increases the productivity and longevity of human bone marrow cultures", Proc. Natl. Acad. Sci. USA, Vol. 88, pp. 6760-6764, August 1991
FZ	David E. HARRISON et al., "Primitive hemopoietic stem cells: direct assay of most productive populations by competitive repopulation with simple binomial correlation and covariance calculations", Experimental Hematology 21:206-219 (1993)

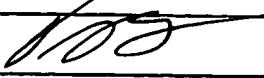
Examiner

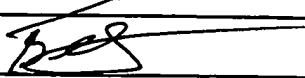
Date Considered

5/13/05

*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 250512US55DIV		SERIAL NO. New U.S. Application	
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT		Alan K. SMITH et al			
		FILING DATE Herewith		GROUP			
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	GA						
	GB						
	GC						
	GD						
	GE						
	GF						
	GG						
	GH						
	GI						
	GJ						
	GK						
	GL						
	GM						
	GN						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO	
	GO						
	GP						
	GQ						
	GR						
	GS						
	GT						
	GU						
	GV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	GW	D. KRUMWIEH et al., "Preclinical Studies on Synergistic Effects of IL-1, IL-3, G-CSF and GM-CSF in Cynomolgus Monkeys", International Journal of Cell Cloning 8:229-248, Suppl. 1 (1990)					
	GX	Makio OGAWA, Ph.D., "Effects of Hemopoietic Growth Factors on Stem Cells in Vitro", Hematology/Oncology Clinics of North America, Vol. 3(3) September 1989, pp. 453-464					
	GY	Jerry CALDWELL et al., "Culture Perfusion Schedules Influence the Metabolic Activity and Granulocyte-Macrophage Colony-Stimulating Factor Production Rates of Human Bone Marrow Stromal Cells", Journal of Cellular Physiology, 147:344-353 (1991)					
	GZ	C.M. HEYWORTH et al., "The Role of Hemopoietic Growth Factors in Self-Renewal and Differentiation of IL-3-Dependent Multipotential Stem Cells", Growth Factors, 1990, Vol. 2, pp. 197-211					
Examiner 				Date Considered 5/18/05			
<p>*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>							

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 250512US55DIV		SERIAL NO. New U.S. Application	
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT		Alan K. SMITH et al			
		FILING DATE Herewith		GROUP			
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	HA						
	HB						
	HC						
	HD						
	HE						
	HF						
	HG						
	HH						
	HI						
	HI						
	HK						
	HL						
	HM						
	HN						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO	
	HO						
	HP						
	HQ						
	HR						
	HS						
	HT						
	HU						
	HV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	HW	Shiang HUANG et al., "Formation of haematopoietic Microenvironment and haematopoietic stem cells from single human bone marrow stem cells", Nature, Vol. 360, 24/31 December 1992, pp. 745-749					
	HX	Randy A. HOCK et al., "Retrovirus-mediated transfer and expression of drug resistance genes in human haematopoietic progenitor cells", Nature, Vol. 320, March 1986, pp. 275-277					
	HY	A.A. FAUSER et al., "Granuloerythropoietic Colonies in Human Bone Marrow, Peripheral Blood, and Cord Blood" Blood, Vol. 52, No. 6, December 1978, pp. 1243-1248					
	HZ	C.D. MYERS et al., "A Cell Line Secreting Stimulating Factors for CFU-GEMM Culture", Blood, Vol. 64, No. 1 (July) 1984, pp. 152-155					
Examiner 				Date Considered 5/18/05			
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 250512US55DIV		SERIAL NO. New U.S. Application	
LIST OF REFERENCES CITED BY APPLICANT				APPLICANT		Alan K. SMITH et al	
				FILING DATE		Herewith	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	IA						
	IB						
	IC						
	ID						
	IE						
	IF						
	IG						
	IH						
	IJ						
	IJ						
	IK						
	IL						
	IM						
	IN						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO	
	IO						
	IP						
	IQ						
	IR						
	IS						
	IT						
	IU						
	IV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	IW	Alice M. WANG et al., "Molecular Cloning of the Complementary DNA for Human Tumor Necrosis Factor", Science, Vol. 228, 20 November 1984, pp. 149-154					
	IX	Colin A. SIEFF et al., "Human Recombinant Granulocyte-Macrophage Colony-Stimulating Factor: A Multilineage Hematopoietin" Science, Vol. 230, 6 December 1985, pp. 1171-1173					
	IY	Robert E. DONAHUTE et al., "Human IL-3 and GM-CSF Act Synergistically in Stimulating Hematopoiesis in Primates", Science, Vol. 241, 30 September 1988, pp. 1820-1823					
	IZ	Ronald H. SCHWARTZ , "A Cell Culture Model for T Lymphocyte Clonal Anergy", Science, Vol. 248, 15 June 1990, pp. 1349-1356					
Examiner 				Date Considered 5/9/05			
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 250512US55DIV		SERIAL NO. New U.S. Application	
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT		Alan K. SMITH et al			
		FILING DATE		Herewith		GROUP	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	JA						
	JB						
	JC						
	JD						
	JE						
	JF						
	JG						
	JH						
	JI						
	JJ						
	JK						
	JL						
	JM						
	JN						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO	
	JO						
	JP						
	JQ						
	JR						
	JS						
	JT						
	JU						
	JV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	JW	Toshio SUDA et al., "A Stimulatory Effect of Recombinant Murine Interleukin-7 (IL-7) on B-Cell Colony Formation and an Inhibitory Effect of IL-1 α ", Blood, Vol. 74, No. 6, November 1, 1989; pp. 1936-1941					
	JX	Heather J. SUTHERLAND et al., "Characterization and Partial Purification of Human Marrow Cells Capable of Initiating Long-Term Hematopoiesis In Vitro", Blood, Vol. 74, No. 5 (October), 1989; pp. 1563-1570					
	JY	Sem SEELAND et al., "Combined and Sequential Effects of Human IL-3 and GM-CSF on the Proliferation of CD34+ Hematopoietic Cells From Cord Blood", Blood, Vol. 73, No. 5, (April), 1989; pp. 1195-1201					
	JZ	Sallie S. BOGGS, "Targeted Gene Modification for Gene Therapy of Stem Cells", International Journal of Cell Cloning 8:80-96 (1990)					
Examiner				Date Considered 5/18/05			
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 250512US55DIV		SERIAL NO. New U.S. Application	
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT		Alan K. SMITH et al			
		FILING DATE		Herewith		GROUP	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	KA						
	KB						
	KC						
	KD						
	KE						
	KF						
	KG						
	KH						
	KI						
	KJ						
	KK						
	KL						
	KM						
	KN						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO	
	KO						
	KP						
	KQ						
	KR						
	KS						
	KT						
	KU						
	KV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	KW	Cynthia E. DUNBAR et al., "Gene Transfer into Hematopoietic Progenitor and Stem Cells: Progress and Problems", Stem Cells 1994;12:563-576					
	KX	Angelika MUELLER, "Die Knochenmarkstammzellkultur Technische Voraussetzungen und klinische Einsatzmoeglichkeiten", Folia Haematol., Leipzig 116 (1989) 5, 731-743					
	KY	Stephen G. EMERSON et al., "Purification of Fetal Hematopoietic Progenitors and Demonstration of Recombinant Multipotential Colony-stimulating Activity", The Journal of Clinical Investigation, Vol. 76, September 1985, 1286-1290					
	KZ	pp. 573-578: "Clinical Transplantation", In <u>Immunology</u> , Second Edition, J. Kuby, W.H. Freeman and Company, New York (1994)					
Examiner				Date Considered <u>5/19/05</u>			
<small>*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</small>							

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 250512US55DIV		SERIAL NO. New U.S. Application	
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT		Alan K. SMITH et al			
		FILING DATE Herewith		GROUP			
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	LA						
	LB						
	LC						
	LD						
	LE						
	LF						
	LG						
	LH						
	LI						
	LJ						
	LK						
	LL						
	LM						
	LN						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO	
	LO						
	LP						
	LQ						
	LR						
	LS						
	LT						
	LU						
	LV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	LW	Theodore FRIEDMANN, "Overcoming the Obstacles-Treating disease by providing needed genes remains a compelling idea, but clinical and basic researchers still have much to do before gene therapy can live up to its promise", Scientific American, June 1997, pp. 96-101					
	LX	Joseph FEDER et al., "The Large-Scale Cultivation of Mammalian Cells", Scientific American, Vol. 248, No. 1 (January 1983), pp. 24-31					
	LY	Heather J. SUTHERLAND, "Functional characterization of individual human hematopoietic stem cells cultured at limiting dilution on supportive marrow stromal layers", Proc. Natl. Acad. Sci. USA, Vol. 87 (1990), pp. 3584-3588					
	LZ	Janice L. GABRILOVE et al., "Pluripotential: A second human hematopoietic colony-stimulating factor produced by the human bladder carcinoma cell line 5637", Proc. Natl. Acad. Sci. USA, Vol. 83, pp. 2478-2482, April 1986					
Examiner				Date Considered 5/18/05			
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO 1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO. 250512US55DIV	SERIAL NO. New U.S. Application
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT	Alan K. SMITH et al
		FILING DATE	GROUP 1644

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
MA							
MB							
MC							
MD							
ME							
MF							
MG							
MH							
MI							
MJ							
MK							
ML							
MM							
MN							

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO
MO						
MP						
MQ						
MR						
MS						
MT						
MU						
MV						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

MW	Jeffrey A. HUBBELL et al., "Endothelial Cell-Selective Materials for Tissue Engineering in the Vascular Graft Via a New Receptor", Biotechnology, Vol. 9, June 1991, pp. 568-572
MX	Jerry CALDWELL et al., "Influence of Medium Exchange Schedules on Metabolic, Growth, and GM-CSF Secretion Rates of Genetically Engineered NIH3T3 Cells", Biotechnology Progress, Vol. 7, No. 1, January/February 1991, pp. 1-8
MY	Li Lu et al., "Effect of recombinant and purified human haematopoietic growth factors on in vitro colony formation by enriched populations of human megakaryocyte progenitor cells", British Journal of Haematology, 1988, Vol. 70, pp. 149-156
MZ	A. Montes BORINAGA et al., "Interleukin-6 is a cofactor for the growth of myeloid cells from human bone marrow aspirates but does not affect the clonogenicity of myeloma cells in vitro", British Journal of Haematology, 1990, No. 76, pp. 476-483

Examiner

Date Considered

5/18/05

*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO 1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO. 250512US55DIV	SERIAL NO. New U.S. Application
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT Alan K. SMITH et al	
		FILING DATE Herewith	GROUP 1644

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
NA							
NB							
NC							
ND							
NE							
NF							
NG							
NH							
NI							
NJ							
NK							
NL							
NM							
NN							

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO
NO						
NP						
NQ						
NR						
NS						
NT						
NU						
NV						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

NW	P.M. LEHN., "Gene therapy using bone marrow transplantation: a 1990 update", Bone Marrow Transplantation (1990), No. 5. pp. 287-293
NX	Manfred R. KOLLER et al., "Beneficial Effects of Reduced Oxygen Tension and Perfusion in Long-Term Hematopoietic Cultures", Biochemical Engineering, VII, Vol. 665 of the Annals New York Academy of Sciences, pp. 105-116, (October 1992)
NY	D. KRUMWIEH et al., "Human Recombinant Derived IL-3 and GM-CSF in Hematopoiesis of Normal Cynomolgus Monkeys", Behring Inst., Mitt., No. 83, pp. 250-257 (1988)
NZ	John BRANDT et al., "Detection of Human Hematopoietic Progenitor Cell Capable of Forming Blast Cell Containing Colonies <i>In Vitro</i> ", Advances in Experimental Medicine and Biology, Vol. 241, pp. 165-173

Examiner

Date Considered

5/18/05

*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 250512US55DIV		SERIAL NO. Herewith	
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT		Alan K. SMITH et al			
		FILING DATE		Herewith		GROUP	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	OA						
	OB						
	OC						
	OD						
	OE						
	OF						
	OG						
	OH						
	OI						
	OJ						
	OK						
	OL						
	OM						
	ON						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO	
	OO						
	OP						
	OQ						
	OR						
	OS						
	OT						
	OU						
	OV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	OW	C.J. EAVES et al., "The Human Hematopoietic Stem Cell In Vitro and In Vivo", Blood Cells (1992) 18:301-307					
	OX	Masaaki ISHIZUKA et al., "Mitogenic Effect of Bestatin on Lymphocytes", The Journal of Antibiotics, Vol. 33, No. 6, (June 1980), pp. 653-662					
	OY	Donald B. Kohn Ph.D. et al., "Gene Therapy for Genetic Diseases", Cancer Investigation, 7(2), pp. 179-192 (1989)					
	OZ	Maria PODOLAK-DAVIDZIAK et al., "Does Human Bladder Carcinoma Cell Line 5637-Conditioned Medium Supplement the Growth of Megakaryocyte Colonies (CFU-Mk) in Cultures of Human bone Marrow", Haematologia, 23:121-123					
Examiner				Date Considered		5/18/05	
Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 250512US55DIV		SERIAL NO. New U.S. Application	
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT		Alan K. SMITH et al			
		FILING DATE		Herewith		GROUP	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
PA							
PB							
PC							
PD							
PE							
PF							
PG							
PH							
PI							
PJ							
PK							
PL							
PM							
PN							
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO	
PO							
PP							
PQ							
PR							
PS							
PT							
PU							
PV							
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	PW	Jan A. NOLTA et al., "Comparison of the Effects of Growth Factors on Retroviral Vecto-Mediated Gene Transfer and the Proliferative Status of Human Hematopoietic Progenitor Cells", Human Gene Therapy, 1:257-268 (1990)					
	PX	Christoph HEBERLEIN et al., "The Gene for Erythropoletin Receptor is Expressed in Multipotential Hematopoietic and Embryonal Stem Cells: Evidence for Differentiation Stage-Specific Regulation", Molecular and Cellular Biology, Vol. 12 (14) pp. 1815-1826, (1992)					
	PY	Nicholas DAINLAK et al., "Interactions of Insulin, Insulinlike Growth Factor II, and Platelet-derived Growth Factor in Erythropoietic Culture", J. Clin. Invest. Vol. 76, September 1985, 1237-1242					
	PZ	Yves-Jacques SCHNEIDER et al., "Monoclonal Antibody Production in Semi-Continuous Serum-and protein-free culture", Journal of Immunological Methods, Vol. 129 (1990) pp.251-268					
Examiner				Date Considered 5/19/05			
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 250512US55DIV		SERIAL NO. New U.S. Application	
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT		Alan K. SMITH et al			
		FILING DATE Herewith		GROUP			
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	QA						
	QB						
	QC						
	QD						
	QE						
	QF						
	QG						
	QH						
	QI						
	QJ						
	QK						
	QL						
	QM						
	QN						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO	
	QO						
	QP						
	QQ						
	QR						
	QS						
	QT						
	QU						
	QV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	QW	Philip W. KANTOFF et al., "Expression of Human Adenosine Deaminase in Nonhuman Primates after Retrovirus-Mediated Gene Transfer", J. Exp. Med. Volume 166, July 1987, pp. 219-234.					
	QX	Suzanne GARTNER et al., "Long-term culture of human bone marrow cells", Proc. Natl. Acad. Sci. USA, Vol. 77, No. 8, pp. 4756-4759, August 1980					
	QY	Kenneth C. EHRLICH et al., "Artificial Capillary Perfusion Cell Culture: Metabolic Studies", In Vitro, Vol. 14, No. 5, 1978, pp. 443-450					
	QX	B. R. JORDAN et al., "Transformation of Murine LMTK-Cells with Purified HLA Class I Genes", Immunogenetics, 18:165-171, 1983					
Examiner					Date Considered <i>5/13/05</i>		
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 250512US55DIV		SERIAL NO. Herewith	
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT		Alan K. SMITH et al			
		FILING DATE Herewith		GROUP			
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	RA						
	RB						
	RC						
	RD						
	RE						
	RF						
	RG						
	RH						
	RI						
	RJ						
	RK						
	RL						
	RM						
	RN						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES NO		
	RO						
	RP						
	RQ						
	RR						
	RS						
	RT						
	RU						
	RV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	RW	E. Morioka et al, "Purification of a granulocyte colony-stimulating factor from the conditioned medium of a subclone of human bladder carcinoma cell line 5637, HTB9", Res. Exp. Med. (1990), 190:229-238					
	RX	Steven A. ROSENBERG et al., "In Vitro Growth of Murine T Cells II. Growth of In Vitro Sensitized Cells Cytotoxic for Alloantigens", The Journal of Immunology, Vol. 121, No. 5. November 1978, pp. 1951-1955					
	RY	James Frank PARSONS et al., "In Vitro Cell Perfusion. 1. System for Continuous Observation of Cells and Analysis of Perfusion Fluid Suitable for Isolated Mast Cell and Macrophage Studies", Journal of Pharmacological Methods Vol. 8, pp. 073-089 (1982)					
	RZ	S. R. ADAMSON et al., "Industrial Mammalian Cell Culture", The Canadian Journal of Chemical Engineering, Vol. 64, August 1986, pp. 531-539					
Examiner				Date Considered <i>5/19/05</i>			
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 250512US55DIV		SERIAL NO. Herewith	
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT		Alan K. SMITH et al			
		FILING DATE		Herewith		GROUP	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	SA						
	SB						
	SC						
	SD						
	SE						
	SF						
	SG						
	SH						
	SI						
	SJ						
	SK						
	SL						
	SM						
	SN						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO	
	SO						
	SP						
	SQ						
	SR						
	SS						
	ST						
	SU						
	SV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	SW	Avshalom MIZRAHI, "Production of Biologicals from Animal Cells an Overview", Process Biochemistry, (August 1986), pp. 108-112					
	SX	Eastment and Rusceth, "Evaluation of Hematopoiesis in Long-Term Bone Marrow Culture: Comparison of Species Differences" In Long-Term Bone Marrow Culture, Kroc Foundation Series Vol. 18, Proceeding of a Symposium Held at the Kroc Foundation Santa Ynez Valley, California, September 12-16, 1983					
	SY	Connie J. Eaves et al., "Methodology of Long-Term Culture of Human Hemopoietic Cells", J. Tiss. Cult. Meth 13:55-62, 1991					
	SZ	R. Ian FRESHNEY, "Culture of Animal Cells A Manual of Basic Technique", (1987) Department of Medical Oncology Cancer Research Campaign Laboratories University of Glasgow , Second Addition, pp. 305-307, Alan R. Liss, Inc. (New York)					
Examiner				Date Considered		5/19/05	
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 250512US55DIV		SERIAL NO. New U.S. Application	
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT		Alan K. SMITH et al			
		FILING DATE		Herewith			
				GROUP			
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
TA							
TB							
TC							
TD							
TE							
TF							
TG							
TH							
TI							
TJ							
TK							
TL							
TM							
TN							
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO	
TO							
TP							
TQ							
TR							
TS							
TT							
TU							
TV							
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
TW	Yu-Chung YANG et al., "Human IL-3 (Multi-CSF) Identification by Expression Cloning of a Novel Hematopoietic Growth Factor Related to Murine IL-3", Cell, Vol. 47, pp. 3-10, October 10, 1986						
TX	Ager et al., "Immunology Today, Immune Receptor Supplement, Second Edition, Elsevier Trends Journals, Cambridge, UK. pp.10-21						
TY	Romani et al., Jovr. Exper. Med., 180, pp. 83-93, 1994						
TZ	Siena et al., Exper. Hematol., 23, pp. 1463-1471, 1995						
Examiner				Date Considered <i>5/19/05</i>			
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							



LIST OF RELATED CASES

<u>Docket Number</u>	<u>Serial or Patent Number</u>	<u>Filing or Issue Date</u>	<u>Inventor/ Applicant</u>
216499US55-CONT	10/668,214	09/24/03	SMITH, et al.
250512US55-DIV*	10/815,707	04/02/04	SMITH, et al.
210022US55 CONT	09/893,470	06/29/01	SMITH, et al.
04292-0048-55	09/027,671	02/23/98	SMITH, et al.
214834US55 CONT	09/970,934	10/05/01	EMERSON, et al.
242993US55 CONT	10/668,179	09/24/03	PALSSON, et al.

5/19/05

*Present Application; listed for information
NFO/get/amr/wal

May 25, 2005

Jasemine,

I discussed the scope of enablement rejection and art rejection of claims 46-51 and 54-59 of the instant Application and the applicability of said rejection to the issue Patent 6,835566 with Bonny Eyler. Same rejection can be applied for the issued Patent 6,835566. Therefore, I would like to request a co-signature on the present Office Action.

Thank you,

Michail Belyavskyi

JK
JCC